

Notice of Allowability

Application No.

09/830,972

Examiner

Christopher J Nichols, Ph.D.

Applicant(s)

SCHWAB ET AL.

Art Unit

1647

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 19 August 2004.
2. ☒ The allowed claim(s) is/are 114-132.
3. ☒ The drawings filed on 02 May 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 3.19.03
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Status of Application, Amendments, and/or Claims

1. The Response and Amendment filed 19 August 2004 has been received and entered in full.
2. The Preliminary Amendment filed 21 October 2002 has been received and entered in full.
3. The Declaration under 37 C.F.R. 1.132 filed on 19 August 2004 has been received and taken into consideration.

EXAMINER'S AMENDMENT

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
5. In the Claims:

Claims 1-113 (Cancelled)

Claim 114 (New) An isolated protein that is free of all central nervous system myelin material with which it is natively associated comprising an amino acid sequence selected from the group consisting of
the polypeptide of SEQ ID NO: 2,
amino acids 1-1163 of SEQ ID NO:2,
amino acids 975-1163 of SEQ ID NO:2, and

amino acids 1-171 fused to amino acids 975-1163 of SEQ ID NO:2.

Claim 115 (New) An isolated protein that is free of all central nervous system myelin material with which it is natively associated comprising an amino acid sequence selected from the group consisting of

an amino sequence which has 90% or greater sequence identity with SEQ ID NO: 2,

an amino acid sequence which has 90% or greater sequence identity with amino acids 1-1163 of SEQ ID NO:2, and

an amino acid sequence which has 90% or greater sequence identity with amino acids 1-171 fused to amino acids 975-1163 of SEQ ID NO:2, wherein said protein has Nogo activity.

Claim 116 (New) An isolated protein that is free of all central nervous system myelin material with which it is natively associated comprising an amino acid sequence selected from the group consisting of

an amino sequence which has 95% or greater sequence identity with SEQ ID NO: 2,

an amino acid sequence which has 95% or greater sequence identity with amino acids 1-1163 of SEQ ID NO:2,

an amino acid sequence which has 95% or greater sequence identity with amino acids 975-1163 of SEQ ID NO:2, and

an amino acid sequence which has 95% or greater sequence identity with amino acids 1-171 fused to amino acids 975-1163 of SEQ ID NO:2, wherein said protein has Nogo activity.

Art Unit: 1647

Claim 117 (New) An isolated protein that is free of all central nervous system myelin material with which it is natively associated comprising an amino acid sequence selected from the group consisting of

the polypeptide of SEQ ID NO: 29,

amino acids 1-1178 of SEQ ID NO:29,

amino acids 990-1178 of SEQ ID NO:29, and

amino acids 1-172 fused to amino acids 990-1178 of SEQ ID NO:29.

Claim 118 (New) An isolated protein that is free of all central nervous system myelin material with which it is natively associated comprising an amino acid sequence selected from the group consisting of

an amino acid sequence which has 90% or greater sequence identity with SEQ ID NO:29,

an amino acid sequence which has 90% or greater sequence identity with amino acids 1-1178 of SEQ ID NO:29, and

an amino acid sequence which has 90% or greater sequence identity with amino acids 1-172 fused to amino acids 990-1178 of SEQ ID NO:29, wherein said protein has Nogo activity.

Claim 119 (New) An isolated protein that is free of all central nervous system myelin material with which it is natively associated comprising an amino acid sequence selected from the group consisting of

an amino acid sequence which has 95% or greater sequence identity with SEQ ID NO:29,

an amino acid sequence which has 95% or greater sequence identity with amino acids 1-1178 of SEQ ID NO:29,

an amino acid sequence which has 95% or greater sequence identity with amino acids 990-1178 of SEQ ID NO:29, and

an amino acid sequence which has 95% or greater sequence identity with amino acids 1-172 fused to amino acids 990-1178 of SEQ ID NO:29, wherein said protein has Nogo activity.

Claim 120 (New) A isolated protein that is free of all central nervous system myelin material with which it is natively associated consisting of the polypeptide of SEQ ID NO: 32.

Claim 121 (New) A isolated protein that is free of all central nervous system myelin material with which it is natively associated consisting of an amino acid sequence which has 90% or greater sequence identity with SEQ ID NO: 32, wherein said protein has Nogo activity.

Claim 122 (New) A isolated protein that is free of all central nervous system myelin material with which it is natively associated consisting of an amino acid sequence which has 95% or greater sequence identity with SEQ ID NO: 32, wherein said protein has Nogo activity.

Claim 123 (New) The protein of any one of claims 114, 115, 116, 117, 118, 119, 120, 121, or 122, wherein said protein is mammalian.

Art Unit: 1647

Claim 124 (New) The protein of any one of claims 114, 115, 116, 117, 118, 119, 120, 121, or 122, wherein said protein is human.

Claim 125 (New) The protein of any one of claims 114, 115, 116, 117, 118, 119, 120, 121, or 122, wherein said protein is recombinant.

Claim 126 (New) An isolated nucleic acid comprising a polynucleotide which encodes the protein of any one of claims 114, 115, 116, 117, 118, 119, 120, 121, or 122.

Claim 127 (New) An isolated nucleic acid comprising a polynucleotide which hybridizes to the nucleic acid of Claim 126 under high stringency conditions comprising 6X SSC, 50 mM Tris-HCl (pH 7.5), 1 mM EDTA, 0.02% PVP, 0.02% Ficoll, 0.02% BSA, and 100 µg/ml denatured salmon sperm DNA at 65°C.

Claim 128 (New) An expression vector comprising a nucleotide sequence which encodes the protein of any one of claims 114, 115, 116, 117, 118, 119, 120, 121, or 122.

Claim 129 (New) A recombinant host cell comprising the expression vector of claim 128.

Claim 130 (New) The recombinant host cell of claim 129 wherein in it is a prokaryotic cell.

Claim 131 (New) The recombinant host cell of claim 129 wherein in it is a eukaryotic cell.

Claim 132 (New) A method of producing a recombinant protein comprising culturing a recombinant host cell transformed with the nucleic acid of claim 126 such that a protein encoded by said nucleic acid is expressed by said cell and recovering said expressed protein.

6. Authorization for this examiner's amendment was given in a telephone interview with Adriane Antler on 13 October 2004.

Summary

7. Claims **114-132** are hereby allowed.
8. The Examiner acknowledges that acceptance of the above Examiner's Amendment does not mitigate in any way, shape, or form, Applicant's right to pursue additional subject matter in continuation, continuation-in-part, and/or divisional applications pursuant to 35 U.S.C. §120 and §121.

Art Unit: 1647

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Christopher James Nichols, Ph.D.** whose telephone number is **(571) 272-0889**. The examiner can normally be reached on Monday through Friday, 8:00 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Brenda Brumback** can be reached on **(571) 272-0961**.

The fax number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

CJN
October 12, 2004

Elizabeth C. Kemmerer

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